

**To:** Russ, Timothy[Russ.Tim@epa.gov]; Houk, Jeff (FHWA)[Jeff.Houk@dot.gov]; Perritt, Karen (FHWA)[Karen.Perritt@dot.gov]; Henderson - CDOT, Vanessa[vanessa.henderson@state.co.us]  
**Cc:** Jackson, Scott[Jackson.Scott@epa.gov]; Patulski, Meg[patulski.meg@epa.gov]; Berry, Laura[berry.laura@epa.gov]; Dresser, Chris[Dresser.Chris@epa.gov]; Anderson, Carol[Anderson.Carol@epa.gov]; Odendahl, Steve[Odendahl.Steve@epa.gov]; Dubey, Susmita[dubey.susmita@epa.gov]; Denawa, Mai[Denawa.Mai@epa.gov]  
**From:** Horn, Chris (FHWA)  
**Sent:** Wed 11/30/2016 2:20:41 PM  
**Subject:** RE: Information Transmittal to FHWA/CDOT: I-70 East Project PM Hot-spot Modeling  
[WARNING: DKIM validation failed]  
Fwd: I-70 East Air Quality

Tim,

**Referred to FHWA**

I will address your second concern under a separate email.

Chris Horn, PE

Senior Area Engineer

Colorado Division

Federal Highway Administration

720-963-3017

**From:** Russ, Timothy [<mailto:Russ.Tim@epa.gov>]

**Sent:** Friday, November 18, 2016 1:20 PM

**To:** Horn, Chris (FHWA); Houk, Jeff (FHWA); Perritt, Karen (FHWA); Henderson - CDOT, Vanessa

**Cc:** Jackson, Scott; Patulski, Meg; Berry, Laura; Dresser, Chris; Anderson, Carol; Odendahl, Steve; Dubey, Susmita; Denawa, Mai

**Subject:** Information Transmittal to FHWA/CDOT: I-70 East Project PM Hot-spot Modeling

Hi Chris, Jeff, Karen, and Vanessa,

Based on the Cooperating Agencies consultation meeting of October 25, 2016, subsequent information provided by FHWA, and on our EPA-FHWA conference call of November 17, 2016, EPA offers the below information regarding the I-70 East project's conformity determination evaluation for PM<sub>10</sub>. The first item is with respect to the selection of the La Casa air monitoring location, and its three years of data, for the background monitor for the PM<sub>10</sub> hot-spot modeling. The second item addresses EPA's recommendation to FHWA regarding a sensitivity analysis for the for the PM<sub>10</sub> hot-spot modeling.

Please let me know if there are any questions.

Thanks!

Tim

Tim Russ  
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## **Ex. 5 - Deliberative Process**

**La Casa (CASA)**  
Region: Denver  
Monitoring Station  
4545 Navajo Street  
SAROAD:  
AQS ID: 080310026  
Latitude: 39.779460

Longitude: -105.005124  
 Reporting capabilities (hourly)  
 SLAMS: CO, PM10, PM2.5  
 NAMS: O3, SO2  
 SPM: NO, RD, RS, TEMP, WD, WS

EPA's November, 2015 PM Hot-spot modeling guidance ("Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas") notes the following in section 9.3.4 *24-hour PM<sub>10</sub> NAAQS*:

#### Calculating Design Values and Determining Conformity

The 24-hour PM<sub>10</sub> design value is calculated at each receptor by directly adding the sixth-highest modeled 24-hour concentrations (if using five years of meteorological data) to the appropriate monitor value for the 24-hour background concentration from three years of monitoring data, based on Exhibit 9-6.<sup>153</sup> Exhibit 9-6: Monitor Value Used for Design Value Calculation

Number of Background Concentration Values from the Monitor	Monitor Value Used for Design Value Calculation
< 347	Highest Monitor Value
348 -695	Second Highest Value
696 -1042	Third Highest Value
1043 -1096	Fourth Highest Value

**PM<sub>10</sub> data from the La Casa monitoring site are provided in the table below:**

#### **POC 1 1 in 3 Sampler**

Year	N	Highest value	2 <sup>nd</sup> highest	3 <sup>rd</sup> highest	4 <sup>th</sup> highest
2015	119	55	48	44	43
2014	127	66	65	62	62
2013	122	81	73	56	45

"N" = the number of days of valid data recovery.

**NOTE:** There are actually three PM<sub>10</sub> monitors co-located at the La Casa monitoring location. POC#1 is a “1 in 3” sampler and takes a sample every 3<sup>rd</sup> day; it is our understanding that this is the primary monitor as so designated by CDPHE. POC#2 is a “1 in 6” sampler and takes a sample every 6<sup>th</sup> day and POC#3 is a continuous monitor and samples every day.

## **Ex. 5 - Deliberative Process**